

PUMP SCHEDULE

MARK	SERVICE	MOUNTING	FLOW (GPM)	HEAD (FT)	MIN. HP	RPM	V/PH	VFD (Y/N)	NOTES
P1	HEATING WATER	BASE MOUNTED	110	70	5	1,760	460/3	Y	C-J
P2	HEATING WATER	BASE MOUNTED	110	70	5	1,760	460/3	Y	C-J
BP1	BOILER CIRCULATION	VERTICAL INLINE	46	23	1/2	1,800	115/1	N	A,B,D
BP2	BOILER CIRCULATION	VERTICAL INLINE	46	23	1/2	1,800	115/1	N	A,B,D

NOTES:

- A. SUPPORT PUMP FROM FLOOR WITH VERTICAL SUPPORTS INDEPENDENT FROM PIPING.
- B. BOILER CIRCULATION PUMP POWERED FROM BOILER.
- C. PROVIDE VFD AND BACNET CONTROLS.
- D. PUMP MOTOR SHALL BE NON-OVERLOADING THROUGHOUT THE FULL RANGE OF THE PUMP CURVE.
- E. PUMPS AND VFD'S INSTALLED IN PARALLEL CONFIGURATION FOR 100% REDUNDANCY FOR PUMPS AND VFD'S.
- F. PROVIDE END-SUCTION PUMP, ISOLATION VALVES, AND SUCTION DIFFUSER.
- G. PUMP CONTROLS SHALL CYCLE LEAD AND STANDBY PUMPS AND VFDS DAILY.
- H. FULLY GROUT PUMP WITH NON-SHRINK GROUT.
- I. PROVIDE WITH SPRING ISOLATED MOUNTING PADS.
- J. PROVIDE GAGE AND GAGE COCKS (SUCTION TO DISCHARGE) AND FLEXIBLE PIPE CONNECTORS.

NATURAL GAS HOT WATER BOILER SCHEDULE

MARK	MIN. OUTPUT (MBH)	MIN. EFF. (%)	FLOW (GPM)	EWT (°F)	LWT (°F)	MAX. WPD (FT HD)	BURNER TYPE	ELECTRICAL			WEIGHT LBS	NOTES
								V/PH	MCA	MOC		
B1	470	94	46	160	180	23	MODULATING	120/1	10.5	20	310	A-D
B2	470	94	46	160	180	23	MODULATING	120/1	10.5	20	310	A-D

NOTES:

- A. BOILER BURNER TRIM AND CONTROLS TO MEET LOCALLY ADOPTED ASME CSD-1 REQUIREMENTS.
- B. PROVIDE 4" CONCRETE HOUSEKEEPING PAD.
- C. PROVIDE DISCONNECT SWITCH.
- D. PROVIDE MANUFACTURER'S VERTICAL CONCENTRIC VENT KIT.

APENG

APDIR

Drawing Title

REPLACE BOILER AND
ASSOCIATED SYSTEMS

Project Number

564-19-109

Building Number

44

Engineering
Service

Bar Measures 0 1" one inch or not to scale!

CUSTOM VA FORM 08-6231B OCT13

APSER

Location

MENTAL HEALTH CLINIC

Drawn

WGG

Scale:

NTS

Date

10-31-2013

Drawing Number

SKETCH

Sheet

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